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ABSTRACT

A study presents descriptive and correlational results from questionnaires and tests administered to approximately 650 children in two cohorts, who, with their parents, are participating in a longitudinal study of reading comprehension development. Results from kindergarten and first-grade students showed low but positive correlations for parents' reading and children's performance in reading and consistent correlations for parents' resources and inhibitions--those items parents give to their children and the conditions in the home environments that may actually inhibit the children's performance in reading, such as the amount of time they spend in day care or the number of hours mothers work each week. (Seven tables of data are included. Indexes A and B include questionnaires and eight correlation tables of student measures and parent indices and selected items. Thirty-four references are attached.) (Author/MG)

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CENTER FOR THE STUDY OF READING

Technical Report No. 518

HOME SUPPORT FOR EMERGING LITERACY: WHAT PARENTS DO THAT CORRELATES WITH EARLY READING ACHIEVEMENT

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Abstract

This report presents descriptive and correlational results from questionnaires and tests administered to approximately 650 children in two cohorts who with their parents are participating in a longitudinal study of reading comprehension development. These results are for kindergarten and first-grade children. Results show low but positive correlations for parents reading and children's performance in reading and consistent correlations for parents' resources and inhibitions--those items parents give to their children and the conditions in the home environments that may actually inhibit the children's performance in reading, such as the amount of time they spend in day care or the number of hours mothers work each week. Further discussion centers on the replication of results for Cohort 1 with Cohort 2.

HOME SUPPORT FOR EMERGING LITERACY: WHAT PARENTS DO THAT CORRELATES WITH EARLY READING ACHIEVEMENT

This report has two objectives: (a) to present the descriptive results from questionnaires administered to parents of two cohorts of children involved in a longitudinal study of reading comprehension development and science concept acquisition, and (b) to present the correlations of indices produced from these questionnaires with students' performance in reading comprehension and decoding.

Parents' Reading to Children

The study of the relationship between home environment and children's reading ability has a long tradition. Durkin (1966) was one of the first researchers to link the specific impact parents can have on children's emerging literacy in her landmark book, *Children Who Read Early*. In this study of entering kindergarten children, Durkin asked, "Were there conditions in the homes of early readers that differed from conditions in the homes of the other children?" She found that parents of the early readers had read to their children from the time they were very young, and that those parents had generally supported literacy-related activities by providing things for their children such as books and chalkboards. In addition, those parents had actually taught their children letter sounds.

Since Durkin's work, a number of other researchers (Becher, 1983; Karnes, Schwedel, & Steinberg, 1982; Peterman, 1988), for example, have studied the specific benefits of parents reading to their children as well as differences in the amount of time parents spend reading. Furthermore, reviews of research on parent involvement and reading achievement (i.e., Becher, 1985; Hess, Holloway, Price, & Dickson, 1979) report several studies that show positive relationships for parents reading and children's achievement in reading. Children from homes in which reading occurred regularly have more positive attitudes and higher achievement levels in reading than children whose parents do not read to them. Karnes and her colleagues (1982) in fact found parents of gifted children spent about 21 minutes reading to their children each day whereas parents of children with average intelligence spent less than half that, or 8 to 10 minutes per day, reading to their children.

Behavior While Reading

Does what parents and children do during reading make a difference? Snow (1983), Teale (1978), and Flood (1977) have all studied different parental reading styles. These studies concur that the more interactive the parent-child process during reading the higher the children's performances on reading tasks. In these studies, interactions included parent-initiated discussions and questions to their children as well as children's questions to their parents. Parental questioning was found to be of particular importance, especially with parents who asked questions before beginning reading and then continued to ask their children a variety of questions while reading. Positive effects were also found for parents' questions after reading, as well as for parents who held general discussions with their children about what they were reading.

Exposure to Books

Other researchers (Freitelson & Goldstein, 1986; Hess & Holloway, 1984; Sakamote & Makita, 1973) have identified the importance of exposure to books as a condition that promotes reading achievement in young children. Freitelson and Goldstein's work, which compared children from Israeli school-oriented and nonschool-oriented families, found school-oriented families to have up to 10 times as many books as the nonschool-oriented families. They also found school-oriented parents read to their children daily and at fixed times, usually before bed. These Israeli parents also reported reading the same books repeatedly to their children. In addition, their reading was highly interactive. Freitelson

and Goldstein also found over half the school-oriented parents had begun reading to their children before they were two years old, and 86% had begun reading to their children before they were three.

Parental Reading

Morrow (1983), Clark (1976), and Durkin (1966) have all found that parents of early readers are also readers themselves. Durkin, in fact, found the mothers of early readers to read more than other mothers. It appears that the availability of materials and parents who read while their children are awake present models that may affect children's reading ability in the lower grades.

Parental Expectations

Parental expectation has also been found to be positively related to children's early reading ability. Hess, Holloway, Price, and Dickson (1979) and Wells (1978) report that both parents who explicitly stated to their children that they expected them to learn to read and parents who rewarded their children's reading behavior had children with higher achievement in reading than did either parents who did not state expectations explicitly or parents who pressured their children to succeed in reading and then punished them when they failed. The critical distinction in these studies appears to be between parental expectations and parental pressure.

Parents as Guides

A number of other research teams (Clegg, 1971; Hansen, 1969; Hess, Holloway, Price, & Dickson, 1979; Teale, 1978; Wells, 1978) have also found that when parents play active roles in guiding their children's reading development, their children perform better in reading than do children whose parents take a more passive role. Active parental participation includes selecting reading materials for their children, setting goals, teaching their children the mechanics of reading instruction such as letter sounds and word identification, and listening to their children read.

Reading Performance and Television

Television habits also differ for young children who are the most successful readers. A 1978 report by Comstock and his colleagues found that children aged 2 to 11 averaged just under four hours of television viewing each day if they were good readers, whereas poor readers averaged over four hours of television viewing each day. Boys watched more television than girls, and disadvantaged children watched more television than their more advantaged peers. Interestingly, children who reported the greatest number of hours watching television and reading were the poorest readers. The conclusion suggests that these children may have been watching television and reading at the same time. Therefore, up to a certain point television may facilitate children's reading ability while it has the opposite effect if children watch for more than four hours a day. Wartella and Reeves (1988) report that television viewing actively engages children. They have found that children's time spent viewing television rises greatly in their early years, before they begin school. It drops once they start school, rises again in early adolescence, and drops again as children become teenagers.

Home Computers and Reading

Finally, in 1985 Epstein found home computers to outnumber school computers 10 to 1, suggesting that young students' access to computers is much more likely to take place at home than it is at school, though no reports were found linking students' home computer or video usage to reading achievement.

Summary

In summary, the home environment does represent a "critical substratum variable" (Marjoribanks, 1987) that has been shown to affect young children's reading comprehension ability. The purpose of the questionnaires sent to parents in this longitudinal study is to allow us to characterize eight aspects of this substratum: parents reading to their children; children's participation in reading and school generally; parental resources; parental support; parental instruction; the role of homework; parents' responses to their children's difficulty in reading; and inhibitors in the homes that may negatively affect children's early reading performance.

The heuristic model for this longitudinal study, which is described in detail in Meyer, Linn, and Hastings (1985), shows that home factors have a prominent position in children's emerging literacy. Therefore, the information gathered from questionnaires plays an important part in the development of a model to explain why some children learn to comprehend what they read while others do not. They are thought of as having influenced children before they begin school and they continue to influence them throughout their lives. Once children are in school, the textbooks used in the classroom, teachers' management and instructional styles, and the specific things parents due to support literary development also impact upon children's achievement.

Methodology

The Setting

Three school districts in the midwest participated in this research. Each of the districts has been described extensively elsewhere (Meyer, Wardrop, & Hastings, 1990). Therefore, the description that follows is brief.

District A is a small town about 45 minutes from a larger university town. Many of the parents in this community either farm or operate small businesses. This small district has a reputation for high student performance in reading and average student performance in science. Community support is very strong for the early childhood programs in this school. Any school event typically finds a thousand or more people in attendance, although there are only about 90 children per grade level in the district.

District B students live in a community less than half an hour from a much larger university town. Subsequently, many of the parents of children in this school district have a short commute to work. The parents here tend to have slightly higher economic status positions than parents from District A. In addition, mothers from this district work fewer hours each week than District A mothers. This district has a reputation for average student achievement in reading in the early elementary grades. In the period of data collection for this study, the district changed its instructional science program when it adopted a new textbook for science, offered science workshops to teachers, and appointed science coordinating teachers at each grade level.

District C represents yet another type of setting. Children from just one elementary school in this large district participate in the study. The people that compose this school community are frequently referred to as a "microcosm of the universe." White, Black, and Hispanic families make up this population. Parents in this school district range in background from single-parent domestic hourly employees to two-career professionals. This district is located in a suburb contiguous to a major city. For some families, life here may represent a move from an inner-city environment. This community also includes wealthy, established suburbanites who are often the employers of the school district's domestic workers.

Questionnaires. Questionnaires have been developed, field-tested, and then administered to all parents of children in the study each year. Approximately 80-93% of the questionnaires have been returned each spring, with the return rate increasing as the children get older. Copies of each questionnaire are

in Index A. We wrote a number of items to get at the same information for each questionnaire and then collected those sets of items to form indices. No questions went into more than one index. Collectively, each questionnaire is designed to gather information on items that are then collapsed into eight indices:

1. The amount of time parents spend reading to their children. This index is composed of items such as, "Do you read to your child?" "If you read to your child, when did you begin?" "Does the child ask to be read to?" "Does the child have a favorite book?" and "Is there a regular time for reading?"

2. The degree to which a child participates in reading and other literacy-related activities at home and in school. This is assessed with items such as, "Circle what the child tries to read: Bible, newspapers, comics, magazines, jokes, favorite story, school books, T-shirts, food labels, traffic signs, billboards, TV words." "Does the child try to read to you?" "Does the child read alone?" and "Does the child read to other children?"

3. The resources parents provide to their children, such as the number of books found in the home and the number of children's magazine subscriptions. This is determined by items such as: "Circle what the child tries to look at: picture books, children's reading books, coloring books, comics, alphabet books, number books, school books, newspapers, magazines." "Do you buy reading materials to help your child learn to read?" and "Do you buy games to help your child learn to read?"

4. The amount of general support parents provide as children do schoolwork. This was measured with the following items: "Does the child get any help with schoolwork?" "If someone helps your child read, what kind of help do they usually give?" and "If you help your child with homework, what do you usually do?"

5. The activities parents engage in that go beyond support to being actually instructive. This was measured by asking questions such as: "Do any family members help the child read?" and "If you help your child with homework, do you read instructions? Help with most answers? Help whenever the child asks for help? Help only when the child is stuck?"

6. Parents' responses to their children's difficulties in school. This was measured by asking: "Is your child having any problems in first grade?" and "What is your child's problem?"

7. The amount of homework children bring home in kindergarten. This was determined by asking: "Does the child do school work at home?" and, in first grade: "Does your child have homework?"

8. Finally, the number of conditions that exist in the home that may actually inhibit children's literacy development such as the number of younger siblings and hours the mother works. This was measured by asking questions such as: "About how many hours in a school day does the child usually watch TV?" and "If you buy videogames, how often does the child play with them?" "My child likes to go to school (seldom, never)." and "Check what your child does on your video games or computer (plays games, programs, practices math)."

Generally items were scored 0 or 1 if parents responded to a string of items separately, as in the question above about what the child does with a computer. Raw data were entered and responses were scaled for items in which parents wrote in a number, such as the number of books they had. Most other items had a series of responses, such as the frequencies daily, weekly, occasionally, seldom, and never, which were scored 5, 4, 3, 2, 1.

The first questionnaire, developed by Mason, Bhavnagri, and Meyer (1983) was administered to Cohort 1 children in the spring of 1984. Cohort 2 families received a revised version of that same questionnaire in the spring of 1985. Because many items in the 1985 questionnaire were modified from the 1984 questionnaire, this report will give results for both cohorts on items common to the two questionnaires. Then, it will give results for other items on the more detailed 1985 questionnaire to Cohort 2 parents. The kindergarten questionnaires were revised again for use in first grade. These revisions centered on items related to kindergarten such as: "Check everything your child learned in kindergarten" and "Is your child having any problems in first grade?" At each grade level, the goal is to have some items that repeat from the previous grade and others that are unique to that grade level.

Relationships between child measures. We selected a variety of child measures to correlate to parent indices and items because these measures are administered in different ways, and because a factor analysis of the Cohort 1 kindergarten battery showed that the instruments seem to measure different things. The Wide Range Achievement Test (WRAT) (Jastak, Jastak, & Bijou, 1978) and the Chicago Reading Test (Barr, 1983) are individually administered with a stopping criterion based upon the number of letter names and words (the WRAT), and letter sounds, word endings, word families, and a random word list (the Chicago) that the children read aloud. Only exact responses are scored as correct on these instruments. The Early Reading Test (ERT) (Mason, 1983) was used to test the children's exact and approximate ability to identify words from environmental print. It also included a story reading section and a list of nonsense words. The Woodcock Reading Test (Woodcock, 1973) is similar in administration to the WRAT and Chicago, but it is a cloze test of reading comprehension with pictures for the first several items. Administration of this test stops when children have missed five consecutive items.

The California Achievement Test (CAT) Reading Subtest (CTB/McGraw-Hill, 1978) is group administered. Each child completes all items. Children match the beginning sound in a word the teacher reads to a letter from a list of four that they see. Therefore, children who can match the first and/or second sounds in words that they hear and then see often get most of these types of items correct. In fact, there was little variance between school districts and there was also the threat of a ceiling effect on this instrument.

Results

Kindergarten Questionnaires

Items common to 1984 and 1985. The results in Table 1 illustrate that in many important ways, families in Cohort 1 and families in Cohort 2 reported comparable environments for their children though overall, in the raw data children from Cohort 1 families may have had a slight edge over Cohort 2 children. These results are most similar for the frequency parents report reading to their children, and the frequency that children ask to be read to. In both cases, these events happened more often than weekly but not daily. A few more than half of the children in both cohorts had a favorite book, and the families averaged over 80 books at home. For both cohorts, families occasionally bought reading materials, and family members helped children read. Children from both cohorts read alone occasionally. The cohorts varied somewhat on the age at which parents began reading to their children, with Cohort 1 parents beginning when their children were younger, yet over a year of age. Cohort 1 children also were slightly more likely to subscribe to a magazine than Cohort 2 children.

[Insert Table 1 about here.]

There were a few differences between cohorts on the "other" and "background" questionnaire items. Cohort 2 children frequented the library more often than Cohort 1 children, and they averaged slightly more adults at home. Cohort 2 children also watched considerably more television than Cohort 1 children, and they were more likely to have older siblings and less likely to have younger siblings than their Cohort 1 peers. The educational levels of mothers and fathers were about equal for both cohorts, yet Cohort 2 mothers and fathers were employed in slightly more prestigious positions than the Cohort 1 parents.

Specific items unique to the Cohort 2 questionnaire. Cohort 2 parents reported helping their children read not quite weekly. Over half the time when these parents helped, they had their children sound out or identify words. With less frequency, these parents told the sounds of letters, listened to their child read, or told letter names. Of the 15 television shows the children might watch, over half watched *Sesame Street*, *Smurfs*, and children's movies. Far fewer children watched such nature shows as *Wild Kingdom* or *New Zoo Review*.

Almost all of these children did homework regularly at home. Their most frequent homework was studying words or letters. They also read library books often. These children often received help at home on work in addition to reading. To help their children with their homework, parents most often either assisted by reading instructions or helping whenever the child asked for help. These parents reported almost never helping their child with most homework answers. Two-thirds of Cohort 2 children were never in day care, and only 35% of them were in half day school at age 4.

[Insert Table 2 about here.]

First-Grade Questionnaires

Almost all of the items on the first-grade questionnaire are common to Cohort 1 and Cohort 2. Therefore, Table 3 shows comparisons for both cohorts on almost all items. At this grade level, Cohort 2 parents reported reading to their children almost daily. All of the Cohort 1 children had homework, while only 52% of the Cohort 2 children had homework. Cohort 2 parents bought more books during the year than did Cohort 1 parents. Cohort 2 children read alone almost daily, and perhaps because their children were doing substantially more independent reading, Cohort 2 parents helped their children read more than did Cohort 1 parents. These parents in both cohorts were most likely to help their children sound out words or listen to their children read than to identify words or tell sounds. These parents were also very unlikely to tell their children letter names. Cohort 2 children went to the library almost weekly, whereas Cohort 1 children only occasionally went to the library. Cohort 2 children continued to watch much more television than Cohort 1 children on school days and on Saturdays. Both cohorts seldom practiced reading on a computer at home.

[Insert Table 3 about here.]

Kindergarten Results

Correlations and Partial Correlations of Student Measures and Parent Indices

Cohort 1. Tables A-D in Index B present correlations for various student reading measures and parents' responses to questionnaire indices or individual items. A correlation table is presented separately for each cohort and with indices or individual items for the grade level. Table A shows the relationships found for Cohort 1 students on seven measures of reading and seven indices from the Cohort 1 kindergarten parent questionnaire. In Table A, all correlations above .20 are significant at the $< .001$ level. There are high correlations for the four individually administered measures of decoding, the

WRAT, and Chicago administered in the winter and spring of the kindergarten year. The reading subtest of the CAT correlates highly with the other decoding measures. The Error Detection Test (Meyer, Hastings, & Linn, 1985) provides scores for children's abilities to identify words in short passages that spoil the meaning of the text as well as out-of-sequence items in other passages. This test was administered individually. These subtests correlate moderately with the Woodcock. The individually administered cloze test of reading comprehension, the Woodcock, correlates highly with the decoding measures, the WRAT and the Chicago, but only moderately with the CAT.

Many of the relationships between parent indices and student measures produced correlations that are low to moderate. The parents reading index has surprisingly low correlations with the reading measures. Of particular interest are the low correlations found for this index and the Woodcock as it is a measure of reading comprehension. All correlations for the children's participating index are significant, however. The parent indices for resources, support, and instruction identify parents' reports of the "things" they give to or provide for their children such as the number of books at home, reading games, trips to the library, as well as "who the parents are" as a resource in terms of their levels of education. Correlations for these resources are low at best and then found for only the two *entering* tests, the WRAT, and the Chicago administered at the very beginning or mid-year of kindergarten.

Parental support is contrasted to parental resources and instruction because it identifies parents sitting with but not actually helping their children, or generally helping on homework. The only relationship found to correlate with parental support is children participating. Parental instruction, however, correlates significantly with all of the reading measures except the entering WRAT and the spring CAT. It also correlates moderately with parents reading and highly with children participating.

Homework for this group of kindergarten children failed to correlate with any of the reading measures. It does correlate significantly with children participating and parental support and instruction. Inhibitors such as numerous younger siblings, mother's hours of work, daycare, television (except for educational programs such as *Sesame Street* and the *Electric Company)* correlate only with the entering WRAT scores and parental resources.

Cohort 2. The pattern of significant relationships among measures for Cohort 2 children is very similar to those found for Cohort 1 kindergartners. The battery differs only in that the Chicago was administered at the beginning of the school year instead of at mid-year as it had been to Cohort 1. The indices are nominally the same, but it is important to recall that there are differences between the actual questionnaire items within each index because of the overall differences between questionnaires. The lowest number of children or parents represented in Table B in Index B is 239, so all correlations above .21 are significant at the $< .001$ level. For Cohort 2, parents reading correlates significantly as an index with all of the student measures except the fall Chicago and spring WRAT, although the correlations are low. Child participation and parental resources also correlate significantly at the low-to-moderate levels with the children's measures, as does parental support, except that fall Chicago, total Chicago, CAT, and Woodcock scores are not significant. On these four indices the highest correlations are for child participating, with the total spring Chicago score and parental support for the child participating. Unlike Cohort 1, parental instruction for Cohort 2 students fails to correlate significantly with any of the child measures, though there are significant correlations for parental instruction and child participating, parental resources, and parental support. Homework for these kindergarten children correlates significantly only with child participating, parental support, and instruction. Inhibitors correlate moderately with parental resources.

Cohort 1 individual questionnaire items. Table C in Index B shows the correlations of child measures and five individual items from the parent questionnaires. These items were selected because they have been found to be significant by other researchers and might therefore be expected to have those results replicated with these data. These items also bear examination in isolation because of the longitudinal nature of this study.

Now correlated with student measures as a separate item, the frequency parents report reading to their children correlates significantly with the fall WRAT, as well as the other three decoding measures. These correlations are higher than the correlations of the parent reading index with child measures for Cohort 1. When parents began reading correlates with all child measures and with the frequency parents read. These correlations are understandably negative because this item was scored with a 1 for the youngest age category, a 2 for the next youngest, and so forth. Significant correlations were also found for the family helping the child read with both Chicago scores, the ERT, when parents began reading, the family helping the child read, and the frequency the child reads alone. As an individual item, the frequency the child reads alone correlates significantly only with the Woodcock, and family helping the child read. The hours the mothers work weekly correlates significantly and negatively with the children's comprehension scores on the Woodcock.

Cohort 2 individual questionnaire items. Table C parallels Table B to show correlations for Cohort 2 kindergarten children with child measures and the same five individual items. The frequency with which parents read correlates moderately with children's performance on decoding measures, this time including the CAT subtest. When parents began reading to their children correlates only with fall and spring WRAT, spring Chicago, and CAT and the frequency parents read for Cohort 2 children as compared with significant correlations for all child measures for Cohort 1. Families helping their children read correlates significantly only with spring Chicago and frequency parents read, whereas there are significant correlations for the frequency these children read alone with all other measures on this table except the frequency with which parents read and the child's age when parents began reading. The relationship between hours mothers work and all other measures is not significant for Cohort 2 children. These results appear in Table D in Index B.

Correlations and partial correlations of parent questionnaire indices with spring WRAT scores. How do correlations for Cohort 1 and Cohort 2 indices and selected items compare, and how are these correlations with end of kindergarten WRAT scores affected by partialling out the children's kindergarten entry total WRAT reading scores? Table 4 shows these results. Correlations for parents reading, frequency of parents reading, and when parents began reading show very similar results for both cohorts. Results are less stable for the remaining indices and individual variables. The least stable results for the two cohorts are for parental support, instruction, and the frequency children read alone.

[Insert Table 4 about here.]

After partialling out children's entering WRAT total reading scores, we find that only the correlations for children participating and parental instruction are significant for Cohort 1. None of the partial correlations in Table 4 for Cohort 2 children is significant.

First-Grade Results

Correlations of student measures and parent indices, Cohort 1. Tables E, F, G, and H in Index B present the results of selected student measures and indices from the first-grade parent questionnaires. Table E shows correlations for six student measures and seven indices. The first three child measures are fall and spring measures of decoding. The Woodcock and the two Error Detection subtest scores are measures of comprehension as students had to pick out an absurd target word (a word that spoiled the meaning) for their ED Word Err score and an impossible sequence error for the ED Seq Err. In this table, all correlations above .20 are significant at the < .001 level.

The three measures of decoding correlate highly with each other, and the Woodcock comprehension score from the spring correlates very highly (.84) with the spring WRAT score. The Error Detection subtests both correlate significantly, though low to moderately, with the decoding measures and the Woodcock. Few of the scores from the parent indices correlate significantly with the child measures, with the exception of the child participating scores and parents' responses to children's difficulty, and

these correlations are low to moderate. Parental resources have low correlations with the children's fall WRAT and spring Woodcock scores and are moderately correlated with parents reading and child participating. Parental support correlates moderately with children's being able to identify an absurd target word in the Error Detection Test and highly with child participating. Parental instruction correlates negatively and significantly with spring WRAT score and parental resources. Inhibitors correlate only with instruction and resources.

Correlations of student measures and parent indices, Cohort 2. The relationship found for Cohort 1 between child measures and parent indices appears stronger than that for Cohort 2 as seen in Table F in Index B, but the relationships between the six child measures are stronger for Cohort 2 children than they were for Cohort 1 students. We found no significant correlations for parents reading, child participating, parental resources, or support, and only one significant correlation for parental instruction with parental resources. Table F does show low but significant correlations for parents' responses to their children's difficulties and children's performance on the fall Chicago, and spring WRAT and Woodcock. Homework correlated with nothing and inhibitors correlated highly with resources.

Cohort 1 individual questionnaire items. Table G shows the correlations of the six first-grade measures and three individual questionnaire items, the frequency parents report reading to their children, the frequency they say their children read alone, and the frequency with which they help their children read. The only significant correlations between the child measures and parent responses are for the frequency the child reads alone with their fall and spring WRAT and spring Woodcock scores. The frequency parents help their children read correlates only with the frequency they read to their children and the frequency children read alone.

Cohort 2 individual questionnaire items. The correlations for Cohort 2 individual items are very similar to those found for Cohort 1, although because of the lower *N* only two of the relationships, child reading alone and the Woodcock score, and frequency parents read with frequency parents help their children are significant at the < .001 level. Both of these relationships were significant for Cohort 1 children and items as well. Table H in Index B shows these results.

Correlations and partial correlations of parent questionnaire indices with spring WRAT scores. Table 5 shows correlations and partial correlations for parent questionnaire indices and selected items with fall WRAT scores with and without the fall kindergarten WRAT scores partialled out. With the entering WRAT scores partialled out only the children's participation, parental instruction, and the frequency children read alone are significant though parents' responses to their children's difficulties approach significance. Cohort 2 partial correlations show only parents' responses to their children's difficulties are significant at the < .001 level.

[Insert Table 5 about here.]

Relationship of Kindergarten and First-Grade Indices

Cohort 1. How are the responses that parents gave that compose the indices when their children were kindergartners related to responses parents gave when their children were first graders? Table 6 presents the correlations of kindergarten and first-grade indices for Cohort 1. Parents reading in kindergarten correlates significantly with parents reading in first grade as does the kindergarten child participating index correlate significantly with the first-grade child participating index. Parental resources in kindergarten (but neither parental support nor parental instruction) correlate with those same indices in first grade.

[Insert Table 6 about here.]

Cohort 2. Table 7 shows the kindergarten to first-grade index correlations for Cohort 2. The results for Cohort 1 are basically replicated for Cohort 2. The only kindergarten index that correlates with its comparable first-grade index is parents reading, and that relationship is moderate (r = .38).

[Insert Table 7 about here.]

Discussion

In this discussion, we will focus on the relationships between what parents report that they do with their children and what they bring to their children because of who they are. Specifically, we will (a) explore the relatively weak correlations for parents reading and child performance on measures and the changes in these relationships from kindergarten to first grade, and (b) look at the relationship between parental resources and inhibitors.

Parents reading. The correlations for parents reading and child measures are surprisingly low for both cohorts and grade levels, particularly given the prominence that this home characteristic receives in the literature. As parents reading failed to correlate with the CAT while correlating with the other measures, it suggests again that those tests that most accurately measured students' reading are most related to parents reading at the entering kindergarten level. The very low correlations for parents reading that are not significant with first-grade measures suggests that other influences, most probably school, begin influencing children's performance more than parents reading does. As kindergartens begin to provide more academic instruction in reading than they did in the past, correlations between parents reading and their children's reading achievement may continue to decrease. Furthermore, the lack of correlations between a child's reading alone and parents reading to their children suggests that children's reading rather quickly becomes quite unrelated to parents reading.

Furthermore, a review of the studies cited by Hess (1979) and his colleagues as producing positive relationships between parents reading and children's performance in reading revealed the following. Durkin had not calculated correlations for these two variables. Briggs and Elkind (1977) found with a factor analysis of items on their parent interviews of parents of 33 early (before kindergarten) reading children and 33 control children (to whom they gave a battery of tests) that they had five factors: socioeconomic, parent achievement orientation, play performance, family interest in language, and a fifth factor, child interest in reading. Briggs and Elkind report, "Child interest in reading dealt with the child's interest in learning to read, the age of showing this interest, how often the child was read to and how much television the child watched. There were no significant main or interaction effects for this variable" (p. 1234).

King and Friesen (1972) studied 31 kindergarten readers and 31 kindergarten nonreaders. Their study compared differences in family background, preschool experiences and numerous other variables commonly associated with reading. Like Briggs and Elkind, King and Friesen gave the children a battery of tests and gave questionnaires to parents. Many of the questionnaire items focused on such prereading activities as parents reading to children. King and Friesen report, "Of the readers, 21 were read to regularly, five irregularly, and five not at all. For the other group, 21 were also read to regularly, three often and seven not at all" (p. 153). With these groups, greater differences were found for frequency of trips to the library.

Milner (1951) studied 42 first-grade children with a group of tests. Twenty-one children were the highest scorers, and the remaining 21 were the lowest scorers of the 111 children tested. Children and parents were interviewed as well. Approximately 71% of the parents participated. Milner's hypotheses were that (a) reading ability in first grade is related to certain parent-child interactions, (b) interactions with high- and low-ability children are also related to high and low family social status, and (c) high reading ability is related to high family status. Milner concluded that "social-class factors have, in all probability, directly or indirectly influenced the results of this study, and then go on to an analysis of the

findings on their own merits" (p. 107). Milner did conclude that high-scoring children are read to by "personally-important adults more than are the low-scoring children" (p. 107).

Miller (1969) studied home prereading experiences and first-grade achievement in order to determine if lower class children participate less often in experiences related to later success in reading than their middle-class peers. By using the same instrument with middle and lower class parents, Miller concluded, "Most of the children in the middle class had often heard books or stories read to them by a parent or an older sibling. In the two lower groups the majority of the children heard books or stories in their homes also although the incidence was generally less than in the families of the middle class" (p. 642). Miller also reports correlations for 19 middle-class children to be .39, 19 upper-lower class children to be .48, and 17 lower class children to be .57 for home prereading activities and the children's reading readiness scores.

Almy (1949) studied 106 children from a predominantly single-family dwelling area in Long Island, New York. She dropped from her study all children whose parents did not respond to her questionnaire. She had first-grade reading data on the children and parents' responses to questionnaires. Almy included parents reading in an 11-point index that also included items such as, "Did they have any books?" "Did anyone try to teach them to read?" "Did he ever pay attention to the signs he saw?" "Did he ever use books, magazines, paper and pencil in his play?" "Did he ask to be read to often?" and "Did he ever pretend he was reading?" Almy's index correlated .25 with her reading criterion.

Taken together, then, these studies suggest the relationships between parents reading and children's performance may be strongest for at-risk students, though this statement is tenuous at best given the results of the King and Friesen (1972) work with carefully matched kindergarten readers and nonreaders, which showed no differences for the variable of parents reading. It is also possible that the low correlation between parents reading and their children's scores on the reading measures could be due in part to the information parents gave us on the questionnaire. It is doubtful that many parents would report that they did not read to their children.

Resources and inhibitors. One of the most interesting and consistent correlations found in these data is for the relationship between parents' resources and inhibitors. Resources as measured by items in these questionnaires most often refer to things parents can buy for their children (such as books, games, and magazine subscriptions) are related to items we classified as inhibitors such as time mothers spend working, non-educational television programs, day care, and so forth. This relationship suggests that parents who supply their children with the most things also have homes with a number of characteristics that may inhibit their children's literacy development.

Differences between cohorts. When one undertakes a study with two cohorts of students, the primary function of the second cohort is to replicate findings for the first cohort. The relationships found between measures for these two cohorts is fairly nicely replicated. The replication of indices and/or items from the parent questionnaires is less consistent than one would like. Further analyses will try to explain these relationships in ways that correlations cannot. For example, we will explore the impact of Cohort 1 District A mothers working fewer hours than mothers in any of the other districts and cohorts, as well as the impact of the school programs in these three districts, to determine the extent to which they explain differences in student performance. In future analyses it will also be possible to link specific parents' responses from one year to the next to examine the reliability of their responses over time.

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Table 1

Results from Comparable Items on the 1984 and 1985 Kindergarten Questionnaires

	Cohort 1 $N = 274$			Cohort 2 $N = 264$		
	$\bar{x}$		SD	$\bar{x}$		SD
Reading Items						
1. Do you read to your child?	3.20		(.81)**	3.05		(.84)**
2. If you read to your child, when did you begin?	1.57		(.87)	1.55		(.95)
3. Does the child ask to be read to?	3.11		(.96)**	3.00		(.95)**
4. Does the child have a favorite book?		52%			53%	
5. Did a family member read to the child yesterday?		64%			51%	
6. About how many children's books to you have at home?	82.60		(70.83)	86.58		(95.09)
7. Number of magazine subscriptions the child has	.94		(.99)***	.87		(1.09)***
8. Do you buy reading materials to help your child learn to read?	1.07		(.63)*	1.18		(.55)*
9. Family members help my child read:	2.51		(1.16)**	2.39		(.89)**
10. Does your child read alone?	1.56		(1.52)**	1.44		(1.50)**
Other Items						
1. Does the child take books from the public library?		60%			79%	
2. About how many hours does your child usually watch TV:						
On a school day?	2.81		(1.41)	3.94		(2.90)
On a Saturday?	3.63		(1.84)	6.00		(3.11)
3. Does your child talk to you about television programs?	3.11		(.99)**	2.60		(1.07)**
4. If you buy video games, how often does your child play with them?	1.20		(1.33)**	.80		(1.00)**
5. Does your child do school work at home?	1.29		(.75)*	1.27		(.65)*
Background of Child and Family						
1. How many brothers and sisters?	1.46		(1.08)	1.49		(1.56)
How many are older?	.48		(.61)	.86		(1.17)
How many are younger?	1.96		(.46)	.63		(1.02)
2. How many adults live at home?	1.99		(.10)	1.98		(.55)
3. Highest school mother completed?		>hs			>hs	
4. Highest school father completed?		>hs			>hs	
5. About how many hours does mother work each week?	19.62		(18.11)	38.71		(25.59)
6. About how many hours does father work each week?	43.72		(10.65)	46.71		(13.61)

* This item was scored 2-0 for Very Often, Occasionally, Never.
** This item was scored 4-0 for Daily, Weekly, Occasionally, Seldom, Never.
*** The range on this item was 0-5 for Cohort 1 and 0-10 for Cohort 2.

Table 2

Specific Items Unique to the Cohort 2 Kindergarten Questionnaire (N = 264)

Reading	
1. Family members help my child read:	> occasionally
	Percent
2. If someone helps your child read, what kind of help do they usually give?	
identifies words	57
helps with sounding out words	68
tells letter names	34
tells sounds of letters	50
listens to child read	40
Other	
1. Check all the television shows below your child watches regularly.	
Sesame Street	59
Underdog	13
New Zoo Review	2
Jackson Five	10
Smurfs	61
Children's Movies	52
Kids Incorporated	28
Electric Company	21
Muppets	39
Other	14
Wild Kingdom	18
Space Kidettes	7
Inspector Gadget	36
Mr. Rogers	31
Fraggle Rock	36
2. Does the child do school work at home? What kind of work?	
Reads library books	47
Reads school books	30
Finishes work	19
Studies words or letters	70
3. Does your child get any help at home on any school work other than reading?	79

Table 2 (Continued)

Other (Cont.)	Percent
4. If you help your child with homework, what do you do?	
Read instructions	45
Help with most answers	4
Help whenever the child asks for help	46
Help only when the child is stuck	24
Sit with the child without actually helping	24
5. My child is in day care:	
Before school	5
After school	11
Before and after school	11
Rarely	4
Never	67

6. If your child went to school or to a babysitter before kindergarten, please check the kind of care and when the child attended.

	(Percent)			
	Age 1	Age 2	Age 3	Age 4
Half day school	1	2	22	35
Whole day school	3	7	11	13
Part day babysitting	9	9	10	12
Whole day babysitting	22	21	20	16

Table 3

Results from Comparable Items on the First-Grade Questionnaires

	Cohort 1 *N* = 296	Cohort 2 *N* = 271
1. Do you read to your child?	2.89 (.88)**	3.92 (.87)**
2. Important things your child learned in kindergarten:		
Play	90%	89%
Music	95%	94%
Reading	76%	77%
Behavior	85%	85%
3. Does your child have homework?	100% No	52% No
4. How many books did you buy this year?	1-5	> 6-10
5. How often does your child read alone?	3.34 (.91)**	4.21 (1.05)**
6. How long does your child read alone?	> 5-15 min.	> 5-15 min.
7. How often do you help your child read?	3.02 (.89)**	4.02 (.95)**
8. How do you help your child read?		
Identify words	36%	34%
Sound out words	80%	73%
Tell letter names	6%	5%
Tell sounds	21%	18%
Listen as child reads	78%	75%
9. How often does your child go to a library?	2.73 (.60)**	2.83 (.53)**
10. How often does your child watch television?		
On a school day?	1-2 hours	1-2 hours
On a Saturday?	1-2 hours	1-2 hours
11. If your child has access to a computer, how often does your child practice reading on the computer?	.10 (.29)*	.15 (.36)*

* This item was scored 0/1 for yes/no.
** These items were scored 4-0 for Daily, Weekly, Occasionally, Seldom, Never.
*** These items were scored 5-1 for Daily, Weekly, Occasionally, Seldom, Never.

Table 4

Correlations of Parent Questionnaire Indices and Selected Items with Spring Kindergarten WRAT Scores, With and Without the Fall WRAT Scores Partialled Out

Questionnaire Variable	Cohort 1*		Cohort 2**	
	Corr	Partial Corr	Corr	Partial Corr
Parents Rdg.	.20	.13	.22	.01
C. Participating	.44	.38	.36	.11
P. Resources	.18	.03	.34	.11
P. Support	.06	.13	.29	.11
P. Instruc	.26	.21	.09	.04
Homework	.08	.12	.14	-.07
Inhibitors	.17	.06	.08	.04
Freq. P.'s Rdg.	.30	.17	.27	.07
When P. Beg. Rdg.	-.20	-.01	-.22	-.05
Family Helps	.16	.07	.06	.13
Freq. C. Reads Alone	-.01	-.10	.28	.17
Hrs. M. Wks Wkly	.01	.06	-.07	.11

*Lowest N = 269. All correlations above .20 are significant at the <.001 level.
**Lowest N = 239. All correlations above .21 are significant at the <.001 level.

Table 5

Correlations of Parent Questionnaire Indices and Selected Items with Spring First-Grade WRAT Scores, With and Without the Fall Kindergarten WRAT Scores Partialled Out

Questionnaire Variable	Cohort 1*		Cohort 2**	
	Corr	Partial Corr	Corr	Partial Corr
Parents Rdg.	.11	.06	.11	-.002
C. Participating	.31	.25	.22	.17
P. Resources	.13	.05	.04	.02
P. Support	.07	-.03	.16	.16
P. Instruc	-.29	-.27	-.04	.06
P. Resp. to C. Diff.	-.26	-.19	-.29	-.23
Inhibitors	-.02	.02	.01	.06
Freq. P.'s Rdg.	.11	.06	.11	-.002
Freq. C. Reads Alone	.28	.24	.26	.18
Freq. Helps C. Read	-.11	-.15	.06	-.02

*Lowest N = 266. Correlations above .20 significant at p = <.001.
**Lowest N = 234. Correlations above .22 significant at p = <.001.

Table 6

Correlations of Cohort 1 Kindergarten and First-Grade Parent Indices*

	P Rdg K	C Part, K	P Resources, K	P Support, K	P Instruc, K	Homework, K	Inhibitors, K	P Rdg, 1st	C Part, 1st	P Resources, 1st	P Support, 1st	P Instruc, 1st	P Resp to C Diff, 1st	Inhibitors, 1st
PARENTS RDG K	1.00													
C PARTIC, K	.25	1.00												
P RESOURCES, K	.11	.09	1.00											
P SUPPORT, K	.04	.22	-.14	1.00										
P INSTRUC, K	.30	.59	.08	.18	1.00									
HOMEWORK, K	.11	.34	-.09	.61	.19	1.00								
INHIBITORS, K	-.05	.06	.29	.07	.08	-.04	1.00							
PARENTS RDG, 1st	.54	.16	.18	-.03	.18	.06	.07	1.00						
C PARTIC, 1st	.14	.23	.00	.12	.12	.14	.00	.10	1.00					
P RESOURCES, 1st	.18	.18	.10	.05	.11	.09	.08	.31	.30	1.00				
P SUPPORT, 1st	.11	.08	-.01	-.03	.14	.04	.09	.01	.50	.19	1.00			
P INSTRUC, 1st	.13	-.11	-.11	.15	.06	.15	.04	.16	.05	.29	.12	1.00		
P RESP TO C DIFF, 1st	.00	-.13	-.05	.06	-.06	.11	.01	-.11	-.25	-.06	-.19	.13	1.00	
INHIBITORS, 1st	-.09	-.06	-.14	.12	-.06	.08	-.02	-.08	.19	.37	.09	.23	-.03	1.00

*Lowest N = 222. All correlations above .22 are significant at the < .001 level

Table 7

Correlations of Cohort 2 Kindergarten and First-Grade Parent Indices*

	Parents Rdg K	C Partic, K	P Resources, K	P Support, K	P Instruc, K	Homework, K	Inhibitors, K	P Rdg, 1st	C Partic, 1st	P Resources, 1st	P Support, 1st	P Instruc, 1st	P Respon to C Diff, 1st	Homework, 1st	Inhibitors, 1st
PARENTS RDG K	1.00														
C PARTIC, K	.10	1.00													
P RESOURCES, K	.25	.23	1.00												
P SUPPORT, K	-.01	.44	.20	1.00											
P INSTRUC, K	.09	.30	.25	.36	1.00										
HOMEWORK, K	.11	.65	.09	.36	.32	1.00									
INHIBITORS, K	-.02	.09	.30	.09	.04	-.02	1.00								
P RDG, 1st	.38	.04	.25	-.11	.01	.04	-.05	1.00							
C PARTIC, 1st	.07	.24	.08	.11	.19	.23	-.04	.04	1.00						
P RESOURCES, 1st	.17	.03	.11	.11	.13	.07	.06	.18	.18	1.00					
P SUPPORT, 1st	.23	.14	.18	.04	.22	.12	.04	.10	.14	.15	1.00				
P INSTRUC, 1st	.18	-.06	.00	-.02	.21	.09	.01	.13	.16	.55	.11	1.00			
P RESP TO C DIFF, 1st	.00	-.13	-.03	-.02	-.06	.06	-.02	-.07	-.21	.11	-.04	.18	1.00		
HOMEWORK, 1st	-.01	.05	-.04	-.03	.14	.16	-.13	-.10	.12	.00	.08	.12	.18	1.00	
INHIBITORS, 1st	.04	-.04	-.01	.08	.13	.05	.15	-.05	.21	.64	.14	.43	.02	.03	1.00

*Lowest N = 234. All correlations above .22 are significant at the < .001 level.

Index A

Cohort 1 & 2 Kindergarten Parent Questionnaire
and
Cohort 1 and 2 First-Grade Questionnaires

Kindergarten
General Questionnaire

Child's name _____ Birthdate_____

Reading

1. Do you read to your child?
   DAILY WEEKLY OCCASIONALLY HARDLY EVER NO

2. If you read to your child, when did you begin?

   Age 1, 2, 3, 4, 5

3. Does the child ask to be read to?

   DAILY WEEKLY OCCASIONALLY HARDLY EVER NO

4. Does the child have a favorite book? YES NO
   If yes, about how many times have you read it? _____

5. Is there a regular time for reading? YES SOMETIMES NO
   If yes, when? _____

6. Did any family member read to the child yesterday? YES NO
   If yes, how long? _____ How many books? _____

7. Circle what the child likes to look at: picture books, children's reading books, coloring books, comics, alphabet books, number books, school books, newspapers, magazines. How often?
   DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT AT ALL

8. About how many children's books do you have at home? _____

9. Does the child have any magazine or book subscriptions? YES NO
   If yes, how many? _____

10. Do you buy reading materials to help your child learn to read?
    VERY OFTEN OCCASIONALLY NO

11. Do you buy games to help your child learn to read?
    VERY OFTEN OCCASIONALLY NO

12. Circle what the child *tries* to *read*: Bible, newspapers, comics, magazines, jokes, favorite story, school books, stories, T-shirts, food labels, traffic signs, billboards, TV words. How often?
    DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT AT ALL

13. Does the child try to read to you?
    DAILY WEEKLY OCCASIONALLY HARDLY EVER NO

14. Do any family members help the child read?
    DAILY WEEKLY OCCASIONALLY HARDLY EVER NO

15. Does the child read alone?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT YET

16. Does the child read to other children?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NO

Listening

1. Does the child listen to stories on records and cassettes?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT AT ALL

2. Is story telling without a book a regular family activity?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NO

3. Does the child tell stories to others?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT AT ALL

Writing

1. Does the child try to print letters, words, or stories?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT AT ALL

Circle what the child prints: alphabet letters, words, stories, cards or letters, telephone messages, shopping lists, copying, reminder notes, labeling pictures, own name, other _____

2. Do any family members help the child print?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NO

Other Activities

1. Does the child take books from a public library? YES NO

2. About how many hours in a *school day* does the child usually watch TV? _____

3. How many hours on Saturday does the child watch TV? _____

4. Does the child watch Sesame Street? YES OCCASIONALLY NO

5. Does the child talk to you about TV programs?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT AT ALL

6. If you buy video games, how often does the child play with them?
DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT AT ALL

7. Does the child "play school" with others? YES SOMETIMES NO

8. Does the child do school work at home? YES SOMETIMES NO
What kind of work: read library books, read school books, finish work, study words or letters, other _____

9. Does the child get any help on school work? YES SOMETIMES NO

10. Does the child help with chores? YES SOMETIMES NO
Circle how child helps: making bed, cleaning room, dusting, caring for younger child, caring for pet, picking up toys, cooking, dishwashing, setting table, taking out garbage, mowing lawn, weeding, gardening, raking leaves, shoveling snow, other _____

Background of Child and Family

1. Circle any problems the child has had since birth: major illness, poor hearing, poor vision, hard to toilet train, hard to discipline, tantrums, fearful, overactive, fussy eater, poor sleeper, emotional, distractible, short attention, not adaptable, unpredictable, slow, other _____

2. What do you think are this child's good qualities: calm, confident, considerate of others, emotionally stable, outgoing, friendly, cheerful, understands others' feelings, sense of humor, honest, good-natured, sincere, socially well adjusted, well-liked, bright, clear thinking, curious, inventive, a talker, imaginative, other _____

3. If the child regularly went to school or to a babysitter before kindergarten, please check the kind of care and when the child attended.

	Age 1	Age 2	Age 3	Age 4
half day school	____	____	____	____
whole day school	____	____	____	____
part day babysitting	____	____	____	____
whole day babysitting	____	____	____	____

4. Who usually watches the child after school now? parent, other adult, older child, babysitter, after school program, self care.

5. How many brothers and sisters does this child have? _____
   How many are older _____ younger _____ than this child?

6. How many adults live at home? _____ Circle what adults:
   mother, father, grandparent(s), other relatives or friends

7. Circle the highest school that the child's mother completed:
   elementary, junior high, high school, junior college, university, graduate school

8. Circle the highest school that the child's father completed:
   elementary, junior high, high school, junior college, university, graduate school

9. What kind of work does the child's mother do? _____

   About how many hours of work each week? _____

10. What kind of work does the child's father do? _____

    About how many hours of work each week? _____

11. Are there any other important things about your child learning to read that we should have asked? Please let us know here.

    _____

    _____

Thank you for filling out this questionnaire. We're sorry it was so long, but we couldn't learn what is *really* important without asking many questions. Please send it to us right away or ask your child to take it to school. The teacher will collect them for us.

Kindergarten
General Questionnaire

Reading

1. Do you read to your child?
   DAILY WEEKLY OCCASIONALLY SELDOM NEVER

2. If you read to your child, when did you begin?
   Before age 1 1 2 3 4 5

3. Does the child ask to be read to?
   DAILY WEEKLY OCCASIONALLY SELDOM NEVER

4. Does the child have a favorite book? YES NO
   If yes, how many times have you read it? _____

5. Did a family member read to the child yesterday? YES NO
   If yes, how long? _____ How many books? _____

6. About how many children's books do you have at home? _____

7. Does the child have any magazine or books subscriptions? YES NO
   If yes, how many? _____

8. Do you buy reading materials to help your child learn to read?
   VERY OFTEN OCCASIONALLY NEVER

9. Family members help my child read:
   DAILY WEEKLY OCCASIONALLY SELDOM NEVER

10. If someone helps your child read, what kind of help do they usually give?
    ___ identifies words
    ___ helps with sounding out words
    ___ tells letter names
    ___ tells sounds of letters
    ___ listens to child read

11. Does your child read alone?
    DAILY WEEKLY OCCASIONALLY HARDLY EVER NOT YET

12. Does the child take books from a public library? YES NO

Other Activities

1. About how many hours does your child usually watch TV?
   ___ On a school day?
   ___ On Saturday?

2. Check all the television shows below your child watches regularly.
   ___ Sesame Street
   ___ Underdog
   ___ New Zoo Revue
   ___ Jackson Five
   ___ Smurfs
   ___ Children's Movies
   ___ Kids Incorporated
   ___ Electric Company
   ___ Muppets
   ___ Wild Kingdom
   ___ Space Kidettes
   ___ Inspector Gadget
   ___ Mr. Rogers
   ___ Fraggle Rock

3. Does your child talk to you about television programs?
   DAILY WEEKLY OCCASIONALLY HARDLY EVER NEVER

4. If you buy video games, how often does the child play with them?
   DAILY WEEKLY OCCASIONALLY HARDLY EVER NEVER

5. Does the child do school work at home? YES SOMETIMES NO
   What kind of work?
   ___ Reads library books
   ___ Reads school books
   ___ Finishes work
   ___ Studies words or letters

6. Does your child get any help at home on school work other than reading? YES NO

7. If you help your child with homework, what do you do?
   ___ read instructions
   ___ help with most answers
   ___ help whenever the child asks for help
   ___ help only when the child is stuck
   ___ sit with the child without actually helping

8. My child is in day care:
   ___ before school
   ___ after school
   ___ before and after school
   ___ rarely
   ___ never

Background of Child and Family

1. If your child went to school or to a babysitter before kindergarten, please check the kind of care and when the child attended.

	Age 1	Age 2	Age 3	Age 4
half day school	____	____	____	____
whole day school	____	____	____	____
part day babysitting	____	____	____	____
whole day babysitting	____	____	____	____

2. How many brothers and sisters does this child have?
   How many are older _____ younger _____ than this child?

3. How many adults live at home? _____ Circle which adults:
   Mother Father Grandparent(s) Other relatives Friends

4. Circle the highest school that the child's mother completed:
   Elementary Junior High High School Junior College University Graduate School

5. Circle the highest school that the child's father completed:
   Elementary Junior High High School Junior College University Graduate School

6. What kind of work does the child's mother do? _____

   About how many hours of work each week? _____

7. What kind of work does the child's father do? _____

   About how many hours of work each week? _____

First-Grade
General Questionnaire

School Experiences

1. Check everything below that your child learned in kindergarten:
   ___ to play with other children
   ___ songs, rhymes, and games
   ___ to read, print, and do some math
   ___ how to behave in school

2. My child likes to go to school:
   ___ every day
   ___ usually
   ___ sometimes
   ___ seldom
   ___ never

3. Is your child having any problems in first grade? YES NO
   What is your child's problem? _____

4. If your child learns just one thing in first grade, what would be most important?
   ___ how to relate successfully to other children
   ___ how to read
   ___ how to do arithmetic

5. Does your child have homework? YES NO

6. If you help your child with homework, what do you do?
   ___ read instructions
   ___ help with most answers
   ___ help whenever the child asks for help
   ___ help only when the child is stuck
   ___ sit with the child without actually helping

7. My child is in day care:
   ___ before school
   ___ after school
   ___ before and after school
   ___ rarely
   ___ never

Reading, Library, and Television

1. I read to my child: DAILY WEEKLY OCCASIONALLY SELDOM NEVER

2. How many books have you purchased for your child during this school year?
   0 1-5 6-10 11-15 16+

3. Check all of the magazines below that your child reads/looks at regularly.
   ___ Ranger Rick
   ___ 3-2-1 CONTACT
   ___ Ebony Junior!
   ___ Child Life
   ___ Electric Company Magazine
   ___ Jack and Jill
   ___ Highlights for Children
   ___ Sesame Street

4. My child reads alone: DAILY WEEKLY OCCASIONALLY SELDOM NEVER

5. When my child reads alone, she/he usually reads:
   5-15 min 16-25 min 26-30 min longer

6. Someone in the family helps my child read:
   DAILY WEEKLY OCCASIONALLY SELDOM NEVER

7. If someone helps your child read, what kind of help do they usually give?
   ___ identifies words ___ tells sounds of letters
   ___ helps with sounding out words ___ listens to child read
   ___ tells letter names

8. My child goes to: a school library a public library both neither

9. My child goes to a library: DAILY WEEKLY MONTHLY SELDOM

10. How many books does your child usually check out from the library?
    0 1-2 3-4 5-6 7+

11. My child usually checks out: ___ storybooks ___ magazines ___ information books
    ___ poetry ___ toys ___ records ___ tapes

12. How many hours does your child watch television on a school day?
    ___ 0 ___ 1-2 ___ 3-4 ___ 5+

13. How many hours does your child watch television on Saturday?
    ___ 0 ___ 1-2 ___ 3-4 ___ 5+

14. Check all the television shows below that your child watches regularly.

___ Sesame Street	___ Children's Movies	___ Wild Kingdom
___ Underdog	___ Kids Incorporated	___ Space Kidettes
___ Transformers	___ Electric Company	___ Inspector Gadget
___ Jackson Five	___ Muppets	___ Mr. Rogers
___ Smurfs	___ Mr. Wizard's World	___ Fraggle Rock

15. My first grader usually watches television:
    with an adult with other children alone

16. My first grader and I talk about television programs:
    DAILY WEEKLY OCCASIONALLY SELDOM NEVER

17. Circle the correct word in parentheses. We have (video games, a computer, both video games and computer, neither) at home.

18. My child (does, does not) have access to our video games or computer.

19. Check what your child does on your video games or computer.
    ___ plays games ___ programs ___ practices math ___ practices reading

Index B

Cohort 1 and 2 Kindergarten and First-Grade Correlation Tables of Student Measures and Parent Indices and Selected Items

Table A

Correlations of Cohort 1 Kindergarten Fall, Winter, and Spring Child Measures with Parent Indices*

	T WRAT FK	T CHICAGO, WK	T WRAT, SK	T CHICAGO, SK	CAT R, SK	WOODCOCK, SK	PARENTS RDG	C PARTICIPATING	P RESOURCES	P SUPPORT	P INSTRUC	HOMEWORK	INHIBITORS
T WRAT, FK	1.00												
T CHICAGO, WK	.62	1.00											
T WRAT, SK	.68	.71	1.00										
T CHICAGO, SK	.61	.82	.78	1.00									
CAT R, SK	.57	.51	.61	.63	1.00								
WOODCOCK, SK	.51	.58	.70	.64	.31	1.00							
PARENTS RDG	.16	.19	.20	.19	.12	.12	1.00						
C PARTICIPATING	.25	.33	.44	.38	.22	.41	.25	1.00					
P RESOURCES	.23	.22	.18	.13	.13	.04	.11	.08	1.00				
P SUPPORT	-.05	-.05	.06	-.03	.01	.02	.04	.22	-.14	1.00			
P INSTRUC	.16	.22	.26	.24	.14	.27	.30	.59	.08	.18	1.00		
HOMEWORK	-.01	-.02	.08	.04	.07	.00	.11	.34	-.10	.61	.19	1.00	
INHIBITORS	.19	.10	.17	-.11	.18	.10	-.06	.06	.29	.07	.08	-.04	1.00

*Lowest N = 269. All correlations above .20 are significant at the < .001 level.

Table B

Correlations of Cohort 2 Kindergarten Fall, Winter, and Spring Child Measures with Parent Indices*

	T WRAT FK	T CHICAGO, FK	T WRAT, SK	T CHICAGO, SK	CAT, SK	WOODCOCK, SK	PARENTS RDG	C PARTICIPATING	P RESOURCES	P SUPPORT	P INSTRUC	HOMEWORK	INHIBITORS
T WRAT, FK	1.00												
T CHICAGO, FK	.67	1.00											
T WRAT, SK	.80	.65	1.00										
T CHICAGO, SK	.64	.52	.72	1.00									
CAT R, SK	.63	.38	.56	.60	1.00								
WOODCOCK, SK	.64	.65	.70	.54	.25	1.00							
PARENTS RDG	.27	.23	.22	.28	.27	.09	1.00						
C PARTICIPATING	.37	.25	.36	.42	.27	.28	.10	1.00					
P RESOURCES	.35	.22	.34	.28	.33	.22	.25	.23	1.00				
P SUPPORT	.28	.19	.29	.23	.22	.19	-.01	.44	.20	1.00			
P INSTRUC	.08	.03	.09	.10	.11	-.00	.09	.30	.25	.36	1.00		
HOMEWORK	.18	.10	.14	.21	.12	.08	.11	.65	.09	.36	.32	1.00	
INHIBITORS	.07	.01	.08	-.03	.20	-.00	-.02	.09	.30	.09	.04	.02	1.00

*Lowest N = 239. All correlations above .21 are significant at the < .001 level.

Table C

Correlations of Cohort 1 Kindergarten Child Measures and Selected Parent Items*

	T WRAT, FK	T CHICAGO, FK	T WRAT, SK	T CHICAGO, SK	T ERT, FK	CAT R, SK	WOODCOCK, SK	FREQ P READ	WHEN P BEG	FAMILY HELPS C	FREQ C READS ALONE	HRS M WKS WKLY
T WRAT, FK	1.00											
T CHICAGO, FK	.62	1.00										
T WRAT, SK	.68	.71	1.00									
T CHICAGO, SK	.61	.82	.78	1.00								
T ERT, FK	.54	.40	.49	.43	1.00							
CAT R, SK	.57	.51	.61	.63	.40	1.00						
WOODCOCK, SK	.51	.58	.70	.64	.38	.31	1.00					
FREQ PS READ	.26	.29	.30	.25	.19	.18	.15	1.00				
WHEN P BEG RDG	-.28	-.27	-.20	-.25	-.24	-.23	-.20	-.22	1.00			
FAMILY HELPS C READ	.16	.22	.16	.24	.22	.14	.26	.34	-.22	1.00		
FREQ C READS ALONE	.09	.12	-.01	.15	-.08	-.04	.24	.12	-.07	.34	1.00	
HRS M WKS WKLY	-.05	-.09	.01	-.15	.06	-.08	-.20	.00	-.02	.03	.02	1.00

*Lowest N = 269. All correlations above .20 are significant at the < .001 level.

Table D

Correlations of Cohort 2 Kindergarten Child Measures and Selected Parent Items*

	T WRAT, FK	T CHICAGO, FK	T WRAT, SK	T CHICAGO, SK	CAT R, SK	WOODCOCK, SK	FREQ P'S READ	WHEN P BEG RDG	FAMILY HELPS C READ	FREQ C READS ALONE	HRS M WKS WKLY
T WRAT, FK	1.00										
T CHICAGO, FK	.67	1.00									
T WRAT, SK	.80	.65	1.00								
T CHICAGO, SK	.64	.52	.41	1.00							
CAT R, SK	.63	.28	.62	.60	1.00						
WOODCOCK, SK	.64	.65	.12	.55	.25	1.00					
FREQ P'S READ	.39	.27	.35	.33	.31	.18	1.00				
WHEN P BEG RDG	-.28	-.22	-.25	-.24	-.27	-.10	-.34	1.00			
FAMILY HELPS C READ	.15	.06	.20	.25	-.12	.15	.27	-.20	1.00		
FREQ C READS ALONE	.41	.28	.42	.47	.29	.33	.20	-.17	.29	1.00	
HRS M WKS WKLY	.01	-.07	-.06	.04	.02	.03	.02	.10	-.04	.04	1.00

*Lowest N = 239. All correlations above .21 are significant at the < .001 level.

Table E

Correlations of Cohort 1 First-Grade Child Measures with Parent Indices*

	T WRAT, F	T CHICAGO, F	T WRAT, S	WOODCOCK, S	ED WORD ERR, S	ED SEQ ERR, S	PARENTS RDG	C PARTICIPATING	P RESOURCES	P SUPPORT	P INSTRUC	P RESP TO C DIFF	INHIBITORS
T WRAT, F	1.00												
T CHICAGO, F	.76	1.00											
T WRAT, S	.66	.64	1.00										
WOODCOCK, S	.69	.69	.64	1.00									
ED WORD ERR, S	.25	.25	.35	.34	1.00								
ED SEQ ERR, S	.23	.26	.30	.31	.43	1.00							
PARENTS RDG	.13	.15	.11	.12	.09	.10	1.00						
C PARTICIPATING	.33	.26	.31	.32	.23	.19	.09	1.00					
P RESOURCES	.20	.11	.13	.20	.15	.13	.29	.28	1.00				
P SUPPORT	.15	.14	.07	.11	.21	.16	.01	.50	.18	1.00			
P INSTRUC	-.12	-.14	-.29	-.18	.04	.06	.16	.04	.30	.11	1.00		
P RESP TO C DIFF	-.24	-.25	-.26	-.26	-.10	-.12	-.11	-.27	-.07	-.17	.13	1.00	
INHIBITORS	-.01	.01	-.02	-.02	.06	-.02	-.09	.18	.36	.09	.21	.01	1.00

*Lowest N = 266. All correlations above .20 are significant at the < .001 level.

Table F

Correlations of Cohort 2 First-Grade Child Measures with Parent Indices*

	T WRAT, F	T CHICAGO, F	T WRAT, S	WOODCOCK, S	ED WORD ERR, S	ED SEQ ERR, S	PARENTS RDG	C PARTICIPATING	P RESOURCES	P SUPPORT	P INSTRUC	P RESPON TO C DIFF	HOMEWORK	INHIBITORS
T WRAT, F	1.00													
T CHICAGO, W	.78	1.00												
T WRAT, S	.67	.65	1.00											
WOODCOCK, S	.64	.70	.79	1.00										
ED WORD ERR, S	.38	.33	.41	.39	1.00									
ED SEQ ERR, S	.29	.31	.37	.35	.45	1.00								
PARENTS RDG	.08	.15	.11	.14	.07	.17	1.00							
C PARTICIPATING	.08	.13	.22	.21	.01	.07	.04	1.00						
P RESOURCES	.00	.01	.04	.05	.04	.01	.18	.18	1.00					
P SUPPORT	.04	.04	.16	.12	.11	.16	.10	.14	.15	1.00				
P INSTRUC	-.12	-.16	-.04	-.06	.04	.02	.13	.16	.55	.11	1.00			
P RESPON TO C DIFF	-.21	-.28	-.29	-.31	-.22	-.14	-.07	-.21	.11	-.04	.18	1.00		
HOMEWORK	-.17	-.15	-.07	-.13	-.02	-.02	-.10	.12	.00	.08	.12	.18	1.00	
INHIBITORS	-.08	-.03	.01	.01	-.02	-.13	-.05	.21	.64	.14	.43	.02	.03	1.00

*Lowest N = 234. All correlations above .22 are significant at the < .001 level.

Table G

Correlations of Cohort 1 First-Grade Child Measures and Selected Parent Items *

	T WRAT, F	T CHICAGO, F	T WRAT, S	WOODCOCK, S	ED WORD ERR, S	ED SEQ ERR, S	FREQ P READS	FREQ C READS ALONE	FREQ HELPS C READ
T WRAT, F	1.00								
T CHICAGO, F	.76	1.00							
T WRAT, S	.66	.65	1.00						
WOODCOCK, S	.69	.69	.84	1.00					
ED WORD ERR, S	.25	.25	.35	.34	1.00				
ED SEQ ERR, S	.23	.26	.30	.31	.43	1.00			
FREQ P READS	.13	.15	.11	.12	.09	.10	1.00		
FREQ C READS ALONE	.22	.16	.28	.26	.10	.06	.17	1.00	
FREQ HELPS C READ	-.07	-.10	-.11	-.07	.04	.02	.38	.24	1.00

*Lowest N = 266. All correlations above .20 are significant at the < .001 level.

5

Table H

Correlations of Cohort 2 First-Grade Child Measures and Selected Parent Items *

	T WRAT, F	T CHICAGO, F	T WRAT, S	WOODCOCK, S	ED WORD ERR, S	ED SEQ ERR, S	FREQ P READS	FREQ C READS ALONE	FREQ HELPS C READ
T WRAT, F	1.00								
T CHICAGO, F	.78	1.00							
T WRAT, S	.65	.65	1.00						
WOODCOCK, S	.64	.70	.70	1.00					
ED WORD ERR, S	.38	.33	.41	.39	1.00				
ED SEQ ERR, S	.29	.31	.37	.35	.45	1.00			
FREQ P READS	.08	.15	.11	.14	.07	-.10	1.00		
FREQ C READS ALONE	.18	.16	.26	.28	.08	-.21	.06	1.00	
FREQ HELPS C READ	-.03	-.05	.06	-.00	.12	-.09	.27	.16	1.00

*Lowest N = 234. All correlations above .22 are significant at the <.001 level.

53